**Homework 49** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

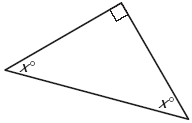
**Classifying Triangles** Period:\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Failure to show all work and write in complete sentences will result in LaSalle!**

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| 1) Solve for x.    Classified by sides \_\_\_\_\_\_\_\_\_\_\_\_\_  Classified by angles \_\_\_\_\_\_\_\_\_\_\_\_ | 2) Solve for x.    Classified by sides \_\_\_\_\_\_\_\_\_\_\_\_\_  Classified by angles \_\_\_\_\_\_\_\_\_\_\_\_ | | 3) Solve for x.    Classified by sides \_\_\_\_\_\_\_\_\_\_\_\_\_  Classified by angles \_\_\_\_\_\_\_\_\_\_\_\_ |
| 4) Graph the triangle according to the given vertices.  A(1, 1), B(4, 0), C(8, 5)    Classified by sides \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Right triangle? \_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| 5) Solve for x. Then find the measure of the indicated angle.    Which theorem is used to solve this problem?   1. Triangle Sum Theorem 2. Exterior Angle Theorem | | 6) Solve for x.    Which theorem is used to solve this problem?   1. Triangle Sum Theorem 2. Exterior Angle Theorem | |

**Mixed Review**

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| 1) What values of x would make the following equation true? | 2) Simplify: |
| 3) What are the values that would make the following expression undefined? | 4) What is the distance between the following two points? |
| 5) An equation of a line in the (x, y) coordinate plane is given as:     1. What is the slope of this line? 2. At what point (x, y) will this line cross the x-axis? 3. At what point (x, y) will this line cross the y-axis? | 6) The points (4, 6) and (9, 10) are on line *a*. Find the equation for the line that is parallel to line *a* and passes through point (0, 4). |
| 7) Simplify: | 8) If , then x =? |

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